## ABSTRACT OF THE DISCLOSURE

The invention relates to a device and a method for transmitting data over the Internet, in particular data for operating and monitoring an automation system (5) using a bidirectional user data connection, even behind fire walls and even from a client which is not visible as a server on the Internet. The method and device transmit a first connection request for setting up a first transmission channel (6a, 7a, 8a) from a first data processing device (1) of a client, in particular from an operator control and monitoring system (1) to an Internet server (4) of an automation system (5) via an Internet connection (6, 7, 8). In addition, a second connection request for setting up a second transmission channel (6b, 7b, 8b) is transmitted to the Internet server (4) from the client (1), the first and second transmission channels being provided for bidirectionally transmitting and receiving, independently of one another in terms of timing, data between the client (1) and the Internet server (4) over the Internet. A chronologically unlimited period of use of the transmission channels is assured by virtue of the fact that in order to maintain the transmission channels, dummy data are transmitted even in the absence of user data.